



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,305	06/23/2006	Satoshi Suda	07481.0049	8969
22852	7590	11/09/2009		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER VASISTH, VISHAL V	
			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			11/09/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/584,305	SUDA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	VISHAL VASISTH	1797	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicants' amendment filed 8/19/2009 amended the scope of independent claim 10. Applicants also amended dependent claims 11-18 for form and in doing so applicants overcame the claim objections from the office action mailed 6/9/2009. Applicants also filed a terminal disclaimer to obviate the provisional double patenting rejection from the office action mailed on 6/9/2009. New grounds of rejection necessitated by the amendment are set forth below.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Konishi et al., US Patent No. 6,300,292 (hereinafter referred to as Konishi).

Konishi discloses a composition with a degree of unsaturation of 0.3 or less (as recited in claim 10) (Col. 11/L. 13-23) comprising a modified vegetable oil such as a genetically modified high oleic sunflower oil (triester of fatty acids and glycerin as recited in claim 10) having an oleic acid profile of 80 wt% (within the range as recited in claim 10), a linoleic acid profile of 8 wt% (within the range as recited in claim 12) and a

Art Unit: 1797

palmitic acid content of 7 wt% (within the range as recited in claims 13-14) (Col. 13-14/Tables 1-3).

The composition of Konishi further comprises additives such as pour point depressants, antioxidants (see Abstract and Col. 11/L. 56-65) and additional synthetic ester base oils including 50 mass% or less of diester base oils (as recited in claim 15) (Col. 3/L. 7-12), and/or mineral oils (hydrocarbon oil as recited in claim 11) (Col. 8-9/L. 13-30). Based on the disclosure of 50 mass% or less of the diester oils, it is inherent that the modified vegetable oils can be present up to 50 mass% as well which is within the range recited in claim 11.

Konishi discloses that the lubricant composition is useful in applications including hydraulic fluids amongst others. Konishi further discloses all of the limitations of the instant claims and therefore inherently could be used as a cutting/grinding/roll forming oil (as recited in claim 16) or a metal working oil (as recited in claim 17) and/or an oil for metal working with a minimal quantity lubricant system (as recited in claim 18).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garmier et al., US Patent No. 6,383,992 (hereinafter referred to as Garmier) in view of Konishi.

Garmier discloses a composition comprising a modified vegetable oil such as 28.66 wt% of a genetically modified sunflower oil (triesters of fatty acids and glycerin as recited in claim 10 and within the range as recited in claim 11) having an oleic acid profile of 70.0 wt% (within the range as recited in claim 10), a linoleic acid profile of 7.0 wt% (within the range as recited in claim 12) and a palmitic acid profile of 13 wt% (within the range as recited in claims 14-15) (Col. 5/L. 44-47). The composition of Garmier further comprises additives such as pour point depressants, antioxidants and additional synthetic ester base oils including mono- and diester base oils (as recited in claim 15), and/or polyalphaolefins (hydrocarbon oil as recited in claim 11) (Col. 8-9/L. 13-30).

Garmier discloses that by chemically modifying sunflower oil by hydrogenation, it is meant that hydrogen is permitted to react with the unsaturated fatty acid profile present such as oleic acid, linoleic acid and linoleic acid. The object is not to remove all the unsaturation. Further, the object is not to hydrogenate such that the oleic acid

profile is reduced to a stearic acid profile. The object of chemical modification via hydrogenation is to engage the linoleic acid profile and reduce or convert a substantial portion of it to an oleic acid profile (Col. 4/L. 27-35). Garmier does not, however, explicitly disclose the degree of unsaturation being below 0.3.

Konishi discloses a composition with a degree of unsaturation of 0.3 or less (as recited in claim 10) (Col. 11/L. 13-23) comprising a modified vegetable oil such as a genetically modified high oleic sunflower oil having an oleic acid profile of 80 wt% (within the range as recited in claim 10), a linoleic acid profile of 8 wt% and a palmitic acid content of 7 wt% (Col. 13-14/Tables 1-3). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the degree of unsaturation disclosed in Konishi for the triester of Garmier in order to enhance the oxidative stability properties of the composition (Col. 1/L. 55-62 of Konishi).

Garmier/Konishi disclose that the lubricant composition is useful in applications including hydraulic fluids amongst others. Garmier/Konishi further disclose all of the limitations of the instant claims and therefore inherently could be used as a cutting/grinding/roll forming oil (as recited in claim 16) or a metal working oil (as recited in claim 17) and/or an oil for metal working with a minimal quantity lubricant system (as recited in claim 18).

***Claim Rejections - 35 USC § 103***

7. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi in view of Yokota et al., US Patent Application Publication No. 2002/0035043 (hereinafter referred to as Yokota).

Konishi discloses all of the limitations discussed above. Konishi further discloses a hydraulic fluid composition that can be used in construction machines, steel molding, machine tools etc. Konishi does not, however, explicitly disclose the composition being used in cutting/grinding/roll forming oil (as recited in claim 16) or a metal working oil (as recited in claim 17) and/or an oil for metal working with a minimal quantity lubricant system (as recited in claim 18) applications.

Yokota discloses a cutting or grinding oil composition (as recited in claim 16) which are suitable for use in a minimal quantity lubrication system (as recited in claim 18) (see Abstract) which can be used to lubricate a metal piece to be cut or ground (as recited in claim 17 (Para. [0001]) comprising high-oleic rape or high-oleic sunflower oil as a base oil along with auxiliary additives. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the composition of Konishi in the applications of Yokota because the compositions are fully capable of performing the functions of Yokota.

### ***Response to Arguments***

8. Applicants' arguments filed on 8/19/2009 with respect to claims 10-18 have been considered and are not persuasive.

Applicants argue that the present invention provides unexpected results and point to data in the specification that allegedly supports their position. There are two issues with this assertion. Firstly, unexpected results does not obviate a 102 rejection and is an important analysis for the independent claims in a 103 rejection. Secondly, the data submitted is not commensurate with the scope of the claims. For example, the example oils of the instant application use very specific base oils that are limited by type of base oil used, concentration, viscosity, dynamic viscosity, viscosity index, acid value, iodine value and linoleic acid content. Instant claim 1 does not recite a type of base oil or concentration for the base oil let alone any of the other limiting factors and only limits the base oils by degree of unsaturation and oleic acid content. Both of which are much broader in the claims than they are in instant specification, Tables 2-5.

Also, applicants need to compare their results to the closest prior art in order to show that the results are truly unexpected.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not



mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VISHAL VASISTH whose telephone number is (571)270-3716. The examiner can normally be reached on M-R 8:30a-5:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VVV

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797